



n January 17, 1991, at 0238 hours local time, AH-64 Apache helicopters fired volleys of Hellfire missiles and rockets, simultaneously destroying two early warning radar sites and paving the way for coalition aircraft to penetrate undetected deep inside Iraq. Minutes later, F-117 stealth fighters, shiplaunched Tomahawk missiles, and cruise missiles launched from B-52s initiated paralyzing strikes around Baghdad. These separate coordinated attacks crippled Iraqi integrated air defenses as well as command and control capabilities. Thus began Operation Desert Storm, a 43-day war that culminated in the liberation of Kuwait after a 100-hour

offensive by coalition ground forces. These opening attacks of the Persian Gulf War are exemplars of the synergy of weapons systems. They highlight the value of having many different arrows in one's quiver and the effectiveness of jointness. Desert Storm reflected the technological superiority of the Armed Forces. More importantly, it was a showcase of the spirit, dedication, and professionalism of American troops.

The 10th anniversary of the Persian Gulf War provides an appropriate moment to examine the nature of an historic victory and profit from its lessons. In tandem with Just Cause in Panama,

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The cover shows M1A1 main battle tank under camouflage, Desert Storm (DOD). The front inside cover features A–10s, Seymour Johnson Air Force Base (U.S. Air Force/Raheem Moore), soldiers covering operations in Kosovo (982<sup>d</sup> Signal Company/Drew Lockwood), marines being extracted during exercise (Fleet Imaging Center Pacific, Guam/Crystal Marie Brooks), and launching S–3B from *USS Enterprise* (U.S. Navy/Marlow P. Dix). The table of contents depicts Iraqis collecting debris allegedly fallen from sky (AP/Wide World Photos/Jassim Mohammed) and *HMS Inflexible* (National Archives). The back inside captures marine disembarking from assault vehicle (U.S. Navy). The back cover shows Korean war

memorial, Washington (Combat Visual Information Center/Robert J. Thayer); marines heading for Blue Beach at Inchon, September 15, 1950 (U.S. Army Signal Corps/Herbert Nutter), F–86 Sabre jets, December 1950 (U.S. Air Force History Office), soldiers atop M–26 tank awaiting North Koreans on Naktong River, September 1950 (U.S. Army Signal Corps/Thomas Marotta).

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Robert A. Silano

**Director of Publications** 

Institute for National Strategic Studies

Editor

Calvin B. Kelley

Copy Editor

### Stephen J. Flanagan

Director Institute for National Strategic Studies Editor-in-Chief

### Martin J. Peters, Jr.

**Production Coordinator** 

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**Executive Editor** 

### William A. Rawley

U.S. Government Printing Office Art Director

for details). Please direct all editorial communications to:

Editor, Joint Force Quarterly ATTN: NDU-NSS-JFQ 300 Fifth Avenue (Bldg. 62) Fort Lesley J. McNair Washington, D.C. 20319-5066

Telephone: (202) 685-4220 / DSN 325-4220 Fax: (202) 685-4219 / DSN 325-4219

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unified commands, and joint force development.

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#### A PROFESSIONAL MILITARY JOURNAL

#### A WORD FROM THE CHAIRMAN

(continued from page 1)

military performance during Desert Shield/Desert Storm was the culmination of a decade of reform in doctrine, training, and leadership development. The conflict validated changes in command and control introduced by the Goldwater-Nichols Act. It also marked a departure from the gradualist approach that characterized American participation in Vietnam. Rather than strike, then pause, as was tried unsuccessfully two decades earlier, the Gulf War was prosecuted vigorously from start to finish, with dramatic results. New weapons and equipment—precision strike munitions, stealth fighters, and information technologies—likewise demonstrated their potential and enhanced the effectiveness of applying overwhelming force.

The Gulf War also underscored the importance of diplomacy and interagency cooperation in dealing with regional and international security challenges. The establishment and maintenance of a coalition of 35 diverse countries under a U.N. mandate required deft diplomatic footwork. And diplomacy also played a major role during the conflict, exposing the intransigence of Saddam Hussein and dissuading Israel from responding to 40 SCUD missiles which struck the country.

# Desert Storm demonstrated the significance of public backing for military operations

Desert Storm also demonstrated the significance of public backing for military operations. As a veteran of the Vietnam War, I was moved to see an overwhelming outpouring of support for our soldiers, sailors, marines, and airmen. The yellow ribbons, letters, and other acts of kindness were inspirational, and the support did not waiver as weeks turned into months. One lesson is that when leaders take the time to explain why risking lives serves national security interests, the people of this Nation will accept the dangers at hand and rally to the cause.

Yet a debate has developed over the conduct of the war and how the United States has dealt with its aftermath. Certainly declaring the cease-fire 100 hours into the ground campaign seemed judicious at the time. Iraq had been thoroughly defeated. However, we stopped before disarming all the Republican Guard, the best-equipped and most loyal element of Saddam's military and a pillar of strength on which his regime relies to

Marines during Imminent Thunder, 1990.



this day. In hindsight, it is easy to argue that coalition forces should have marched to Baghdad, but that was not the declared endstate for the coalition. Indeed, continuing the ground campaign may have fractured the alliance and created complications for the future of the region.

Although the near-term threat to the Persian Gulf was contained, Iraq remains a challenge. Saddam refuses to comply with U.N. resolutions on weapons of mass destruction. It is troubling that Iraq's borders have again been redrawn, labeling Kuwait as a province. In addition, keeping Baghdad in check has become more complicated. International support for sanctions has declined because of factors such as the increased price of oil, the endemic poverty and public health crisis in Iraq, and the heightened tensions between Arabs and Israelis over Palestine.

Given the drawdown of the Armed Forces, coupled with readiness concerns, one question that has arisen during this 10<sup>th</sup> anniversary is whether the Nation could refight Desert Storm today. The military is 40 percent smaller than it was in 1990, while the million-man Iraqi army has gone from fourth largest to tenth, with 350,000 soldiers. If we were to engage Iraq again, the new war would not be a simple replay of Desert Storm. Although the U.S. military is smaller, it still has the best-trained, best-equipped, and best-led force in the world, and its capabilities have improved in many areas. We have maintained a strong partnership with member states of

the Gulf Cooperation Council. This has led to a stabilizing presence in the region with over 20,000 military personnel (3,000 soldiers, 10,500 sailors and marines, and 7,000 airmen). Ground, naval, and air units are dedicated to several important missions including maritime interdiction, no-fly zones, and air defense and ground security in Kuwait and Saudi Arabia. Also, the collective military strength of council members constitutes a much stronger deterrent force than it did in 1990.

The United States has prepositioned four brigade sets of equipment stored on the ground in the theater and afloat. This capability reduces deployment timelines to the region by weeks.

Precision strike capabilities have been improved, with weapons like the joint direct attack munition, a low-cost guidance/navigation system for conventional munitions including the MK–84 2,000-pound bomb. It makes two B–2 bombers capable of attacking the same number of targets in adverse weather as sixteen F–117 stealth fighters in good weather during Desert Storm.

To better employ precision strike capabilities, faster sensor-to-shooter links can now cut the time between acquiring a target and attacking it. We can more rapidly engage mobile targets, such as truck-mounted missile launchers, which proved difficult during Desert Storm even with spotters on the ground inside Iraq.



F-117A during Desert Storm.

But despite such improvements we should not be complacent. The pace of operations since Desert Storm, as well as the procurement holiday of the 1990s, has placed considerable stress on U.S. forces. With the pace and proliferation of technological advances, any supposed advantage

Desert Storm also revealed vulnerabilities inherent in force projection

is at risk. Iraq and other potential adversaries continually study our capabilities and constantly seek to capitalize on our weaknesses, either real or perceived. They will try to counter any advantage with asymmetric

means, such as weapons of mass destruction and cyber warfare.

Desert Storm also revealed vulnerabilities inherent in force projection. First, the military still needs access to sea and aerial ports to build up and supply forces in-theater. In 1990, Saddam Hussein did not contest our entry into Saudi Arabia. We cannot assume that luxury in the future. The U.S. military must develop strategies and capabilities to rapidly overcome enemy port denial operations. Second, it took months to establish an offensive capability in-theater. We need more rapid force projection, including additional airlift and sealift assets.

Logistic support also must be streamlined. If lines of communication into and within a theater are in danger, we will be unable to amass the mountain of matériel that characterized Desert Storm. Integrating logistic information systems and developing real-time asset visibility across the military will enable rapid merger or transfer of supplies among individual service and functional component commands of a joint force. Capitalizing on emerging information technology will reduce logistic footprints in-theater, thereby decreasing both lift and security requirements.

Other advances in information capabilities must be exploited to improve interoperability by the services. Desert Storm was essentially a sequential application of core competencies. The goal is compressing the timeline for the application of force, fully developing total combat power much sooner in a conflict, to reap the benefits of the synergistic effects of the simultaneous application of force, much like the strikes on the opening night of the Gulf War.

U.S. Joint Forces Command—executive agent for joint experimentation—has a mandate to explore concepts and technology to turn the force envisioned in *Joint Vision 2020* into reality. This includes defeating anti-access strategies, capitalizing on information technologies to integrate operations and intelligence, merging command and control networks, streamlining logistic support, and speeding up sensor-to-shooter links.

Command and control must be brought into the 21st century by improvements in concepts and technology, taking full advantage of innovations in doctrine, organization, training, and leadership. Moreover, we must bolster the tactical and operational agility of joint force commands.

Finally, I salute the men and women who participated in Desert Shield/Desert Storm. I will never forget the third day of the ground campaign when I flew over VII Corps and saw hundreds of tanks and armored vehicles heading toward the enemy. Rooster tails of sand spewed high in the air behind the units going north. Following at breakneck speed was a five-ton truck flying a huge garrison flag, bigger than the truck itself, whipping in the wind. My only thought was: "Saddam, here comes the U.S. Armed Forces at their best, and we're coming at you! I hope you know what you've gotten yourself into!" But he did not have a clue.

In the finest tradition of our military, those who fought in the Persian Gulf War demonstrated great skill, dedication, and bravery, contributing to a victory over a ruthless aggressor and proving to the world that America is a reliable ally that will put its sons and daughters in harm's way for the cause of freedom and world peace.

During the 10<sup>th</sup> anniversary of the Gulf War we must look to ensuring stability of the region in the future. This demanding mission calls for diplomatic, political, and economic ingenuity. The Armed Forces will also play a vital role. Just as in 1990, we stand ready to face the task.

HENRY H. SHELTON Chairman of the Joint Chiefs of Staff